



PythagoraSwitch

by Arya Akhavan and Jeffrey Hapeman (November 2013)

Angles for R.I. = 1.540

52 + 15 girdles = 67 facets

3-fold, mirror-image symmetry

96 index

L/W = 1.004 T/W = 0.496 U/W = 0.469

P/W = 0.422 C/W = 0.166

Vol./W³ = 0.188

PAVILION

P1	45.02°	96-32-64	Cut to centerpoint.
P2	44.35°	03-29-35-61-67-93	Meet at culet.
P3	43.00°	06-26-38-58-70-90	Meet at culet.
G1	90.00°	96-32-64	Set stone size.
G2	90.00°	03-29-35-61-67-93	Level girdle.
G3	90.00°	06-26-38-58-70-90	Level girdle.
P4	43.00°	05-27-37-59-69-91	Meet P2, P3, G2, G3

CROWN

C1	49.71°	96-32-64	Set girdle width.
C2	46.72°	03-29-35-61-67-93	Level girdle.
C3	40.57°	06-26-38-58-70-90	Level girdle.
C4	25.00°	12-20-44-52-76-84	Meet G3, C3; C1, C2, C3
C5	23.29°	14-18-46-50-78-82	Meet G3, C3, C4
C6	22.77°	16-48-80	Meet G3, C3, C4, C5
T	0.00°	Table	Meet C1, C2, C3, C4

This is a modification of Jeff Hapeman's "Pythagorean Pinwheel" design, with a few minor changes to the spacing of the fan, and a much shallower brilliant pavilion. It's still very interesting, but better for shallow rough. Works in materials from quartz to CZ (RI = 1.52 - 2.16) with no changes, but I prefer blue zircon.

Suggested size = 10-18 mm

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